

INTERNATIONAL SEARCH REPORT

Application No
PCT/GB2004/005018

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12P19/62 C07H17/08 C12N15/66 C12N15/70 C12N15/76
C12N9/02
//C12R1/465

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12P C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, WPI Data, PAJ, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	SPAGNOLI R ET AL: "Biological conversion of erythronolide B, an intermediate of erythromycin biogenesis, into new hybrid macrolide antibiotics" JOURNAL OF ANTIBIOTICS, JAPAN ANTIBIOTICS RESEARCH ASSOCIATION, TOKYO, JP, vol. 36, no. 4, 1983, pages 365-375, XP002223967 ISSN: 0021-8820 cited in the application abstract	1
Y		1,2,4-6, 9-21
X	- & US 4 429 115 A (CAPPELLETTI ET AL.,) 31 January 1984 (1984-01-31) cited in the application abstract column 3, lines 40-67 ----- -/--	1

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

20 June 2005

Date of mailing of the international search report

06. 09. 2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Mateo Rosell, A.M.

INTERNATIONAL SEARCH REPORT

Application No
PCT/GB2004/005018

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2003/203425 A1 (LEADLAY PETER FRANCIS ET AL) 30 October 2003 (2003-10-30) page 1, left-hand column, paragraph 1 page 3, left-hand column, paragraph 11 - right-hand column, paragraph 19 page 4, left-hand column, paragraph 24 page 4, right-hand column, paragraph 41 - page 5, right-hand column, paragraph 74 page 5, right-hand column, paragraph 81 - page 6, right-hand column, paragraph 101; figures 11,14-16,21,22,24 -----	1,2,4,5, 9-21
Y	MOCHIZUKI S ET AL: "The large linear plasmid pSLA2-L of streptomyces rochei had an unusually condensed gene organization for secondary metabolism" MOLECULAR MICROBIOLOGY, BLACKWELL SCIENTIFIC, OXFORD, GB, vol. 48, no. 6, June 2003 (2003-06), pages 1501-1510, XP002964733 ISSN: 0950-382X cited in the application page 1505, right-hand column, paragraphs 2,3 -----	6
Y	GAISSER SABINE ET AL: "Parallel pathways for oxidation of 14-membered polyketide macrolactones in Saccharopolyspora erythraea" MOLECULAR MICROBIOLOGY, vol. 44, no. 3, May 2002 (2002-05), pages 771-781, XP002331829 ISSN: 0950-382X cited in the application the whole document -----	1,12
A	FR 2 754 821 A (HOECHST MARION ROUSSEL) 24 April 1998 (1998-04-24) abstract page 1, lines 1-15; compound I -----	1
A	FERRERO J L ET AL: "Metabolism and disposition of clarithromycin in man." DRUG METABOLISM AND DISPOSITION: THE BIOLOGICAL FATE OF CHEMICALS. 1990 JUL-AUG, vol. 18, no. 4, July 1990 (1990-07), pages 441-446, XP008048425 ISSN: 0090-9556 scheme 1 page 444, left-hand column, paragraph 2 - page 445, left-hand column, paragraph 1 ----- -/--	1

INTERNATIONAL SEARCH REPORT

Application No
PCT/GB2004/005018

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>OMURA S ET AL: "Antibacterial activity of some acetyl derivatives of kujimycin A." THE JOURNAL OF ANTIBIOTICS. OCT 1971, vol. 24, no. 10, October 1971 (1971-10), pages 717-718, XP008048560 ISSN: 0021-8820 figure 1</p> <p>-----</p>	1

INTERNATIONAL SEARCH REPORT

application No.
PCT/GB2004/005018

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-25 complete, 28-31 partially

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International Application No. PCT/ GB2004/ 005018

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-25 complete, 28-31 partially

A method for generating hydroxylated 14-membered macrolide compounds by feeding a 14-membered aglycone template to a strain capable of hydroxylating such template at 14 and/or 15 position.

2. claims: 26-27 complete, 28-31 partially

A method for generating hydroxylated 14-membered macrolide compounds by identifying a cytochrome P450 capable of hydroxylating a 14-membered aglycone template at 14 and/or 15 position.

3. claims: 32-37

14-membered macrolide compounds

INTERNATIONAL SEARCH REPORT

on patent family members

Application No

PCT/GB2004/005018

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4429115	A	31-01-1984	IT 1169013 B	20-05-1987
			AT 17855 T	15-02-1986
			BE 891733 A1	30-04-1982
			CA 1177427 A1	06-11-1984
			CH 663034 A5	13-11-1987
			DE 3268903 D1	20-03-1986
			EP 0056290 A2	21-07-1982
			FI 820056 A ,B,	10-07-1982
			FR 2502156 A1	24-09-1982
			JP 1698379 C	28-09-1992
			JP 3065944 B	15-10-1991
			JP 57138384 A	26-08-1982
			US 4560662 A	24-12-1985

US 2003203425	A1	30-10-2003	AU 4858801 A	30-10-2001
			CA 2405958 A1	25-10-2001
			EP 1278881 A1	29-01-2003
			WO 0179520 A1	25-10-2001
			JP 2003530857 T	21-10-2003

FR 2754821	A	24-04-1998	FR 2754821 A1	24-04-1998
